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EXAMINER

STORM, DONALD L

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/694,407

Applicant(s)

MURASE ET AL.

Examiner

Donald L. Storm

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on October 28, 2003 through August 21, 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☒ Claim(s) 1-15 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The title is objected to because it is not sufficiently descriptive of the invention. A new title is required that is clearly indicative of the invention to which the claims are directed. See MPEP § 606.01. The Examiner suggests that the Applicant consider a title including these elements: “System and Method for Designating and Immediately Reproducing Information of a Selected Group.”

Claim Informalities

2. Claim 1, and by dependency claims 2-13, are objected to under 37 CFR 1.75(a) because the distinction between the phrase “a given one from the given group” (third-to-last line) and the phrase “the given one of the given group” (last line) needs clarification. Do these refer to the same “one”? Does designating the one remove it “from” the group, or is it still one of the group? If it is removed from the group, how does it remain “of the group”? To further timely prosecution and evaluate prior art, the Examiner has interpreted both phases as --the given one of the given group--. A similar interpretation has been made for claim 3 (two occurrences), claim 4 (two occurrences), claim 5 (two occurrences), claim 6 (two occurrences), and claim 7 (two occurrences).

3. Claim 2 is objected to under 37 CFR 1.75(a) because the distinction between the phrase “the speech recognition unit” (second line) and the phrase “the speech recognizing unit” (two occurrences in claim 1) needs clarification. Do these refer to the same “unit”? The body of the specification seems to indicate that these different terms in the claims refer to the same unit. To further timely prosecution and evaluate prior art, the Examiner has interpreted both phases as --the speech recognition unit--, which terminology is used in the body of the specification. A similar interpretation has been made for claim 11 and claim 16 (three occurrences).

4. Claim 2 is objected to under 37 CFR 1.75(a) because the distinction between the phrase “the reproduction unit” (third-to-last line) and the phrase “the reproducing unit” (in claim 1) needs clarification. Do these refer to the same “unit”? Does the phrase “the reproduction unit” refer to the reproduction system recited in the preamble)? The body of the specification seems to indicate that these different terms in the claims refer to the same unit, except that the terminology “reproduction unit” only appears in the phrase “music reproduction unit”. To further timely prosecution and evaluate prior art, the Examiner has interpreted both phrases as --the reproducing unit--, which terminology is used in the body of the specification.

5. Claim 10 is objected to under 37 CFR 1.75(a) because the distinction between the phrase “the speech recognition unit” (fourth-to-last line) and the phrase “the speech recognizing unit” (two occurrences in claim 10 and two occurrences in claim 1) needs clarification. Do these refer to the same “unit”? The body of the specification seems to indicate that these different terms in the claims refer to the same unit. To further timely prosecution and evaluate prior art, the Examiner has interpreted both phrases as --the speech recognition unit--, which terminology is used in the body of the specification.

6. Claim 14 is objected to for the same reasons as claim 1 because the limitations are recited using obviously similar phrases.

7. Claim 15 is objected to for the same reasons as claim 1 because the limitations are recited using obviously similar phrases.

8. Claim 17 is objected to under 37 CFR 1.75(a) because the meaning of the phrase “The reproduction system” (first line) needs clarification. Because no reproduction system was previously recited, it may be unclear as to what element this phrase refers. To further timely

prosecution and evaluate prior art, the Examiner has examined claim 17 with an assumed dependency to claim 16, not to claim 15; this seems to parallel the subject matter of claim 13.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Kryze

10. Claims 1, 4, 11, 12, 15, 16, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Kryze et al. [US Patent 6,907,397].

11. Regarding claim 1, Kryze describes a system by describing the content and functionality of the recited limitations recognizable as a whole to one versed in the art as the following terminology:

a reproduction system wherein, when a control unit retrieves a given group of pieces of information that corresponds to a search and is a subset of a plurality of pieces of information, the control unit designates a given one of the given group to control a reproducing unit for reproducing the given one; and comprising the reproducing unit for reproducing a piece of information designated from a plurality of stored pieces of information that can be reproduced; and comprising a speech recognition unit for inputting a speech and for recognizing and decomposing the inputted speech; and comprising the control unit for retrieving a piece of information that corresponds to a search and for controlling the reproducing unit for reproducing the retrieved piece of information [at column 1, lines 39-67, as an embedded device for playing media files wherein, when the device for retrieving selected media files that were selected as results of a search and they are a subset of the

media files from a user location, the media file selector selecting the media file and the media file player playing it; and the media file player for playing the selected media file that was selected from media files from a user location of media files for playing; and a speech recognizer for comparing received, input speech to speech recognition grammars, thereby selecting the media file; and the media file selector for retrieving the selected media file that was selected by speech driven search and the media file player for playing the retrieved media file];

the reproduced pieces are stored in a storing unit for storing the plurality of pieces of information [at column 2, lines 45-47, as the data store of downloaded media files for future access];

the inputted speech is recognized and decomposed into words [at column 4, lines 13-25, as user input speech corresponding to recognition of keywords, such as “all songs”];

the correspondence to the search is to a search word from the stored pieces of information [at column 4, lines 2-4, as the file associated with the grammar is stored in a data store];

the control unit for designating the search word from the recognized words sent by the speech recognition unit [at column 4, lines 22-39, as designating a search string based on recognition of keywords as search terms for slots];

the control for reproducing occurs instantaneously [at column 5, lines 9-11, as once the temporary play list is constructed, the method exits selection mode and automatically enters a play mode].

12. Regarding claim 4, Kryze also describes:

when designated, the given one is randomly designated [at column 6, lines 6-7, as a song was randomly selected].

13. Regarding claim 11, Kryze also describes:

a combination information storing unit for storing a plurality of pieces of information [at column 2, line 55-column 3, line 3, as the data store can store the index the includes recognition grammars, descriptive text, supplemental information, trivia, and user-entered voice bindings];

the pieces relate to combination among words [at column 4, lines 22-40, as the keywords form a plurality of hypotheses designated by certain keywords, a first slot, and subsequent slots];

wherein, when the combination information is not include din the storing unit, the speech recognition unit executes never sending the recognized words to the control unit (or other) [see Fig. 4, items 404, 410, 412, and their descriptions, especially at column 4, lines 33-57, when recognition hypotheses for first slot and subsequent slots are compared to grammar of available files and fails to find good matches, return to RECEIVE INPUT SPEECH].

14. Regarding claim 12, Kryze also describes:

each of the plurality of pieces of information includes information of a musical composition [see Fig. 1, items 112, ROCK SONGS, POP HITS, JAZZ, TECHNO, and HEAVY METAL].

15. Claim 15 sets forth a method with limitations comprising the functionality associated with using the apparatus recited in claim 1. Kryze describes those similar limitations as indicated there.

16. Regarding claim 16, Kryze describes a system by describing the content and functionality of the recited limitations recognizable as a whole to one versed in the art as the following terminology:

a reproduction system comprising a reproducing unit for reproducing a piece of information that can be reproduced and is designated from a plurality of stored pieces of information; and comprising a speech recognition unit for inputting a speech and for recognizing and decomposing the inputted speech; and comprising the control unit for retrieving a piece of information that corresponds to a search and for controlling the reproducing unit for reproducing the retrieved piece

of information [at column 1, lines 39-67, as an embedded device for playing media files wherein, when the device for retrieving selected media files that were selected as results of a search and they are a subset of the media files from a user location, the media file selector selecting the media file and the media file player playing it; and the media file player for playing the selected media file that was selected from media files from a user location of media files for playing; and a speech recognizer for comparing received, input speech to speech recognition grammars, thereby selecting the media file; and the media file selector for retrieving the selected media file that was selected by speech driven search and the media file player for playing the retrieved media file];

the reproduced pieces are stored in a storing unit for storing the plurality of pieces of information [at column 2, lines 45-47, as the data store of downloaded media files for future access];

the inputted speech is recognized and decomposed into words [at column 4, lines 13-25, as user input speech corresponding to recognition of keywords, such as "all songs"];

the correspondence to the search is to a search word from the stored pieces of information [at column 4, lines 2-4, as the file associated with the grammar is stored in a data store];

the control unit for designating the search word from the recognized words sent by the speech recognition unit [at column 4, lines 22-39, as designating a search string based on recognition of keywords as search terms for slots];

a combination information storing unit for storing a plurality of pieces of information [at column 2, line 55-column 3, line 3, as the data store can store the index the includes recognition grammars, descriptive text, supplemental information, trivia, and user-entered voice bindings];

the pieces relate to combination among words [at column 4, lines 22-40, as the keywords form a plurality of hypotheses designated by certain keywords, a first slot, and subsequent slots];

wherein, when combination among the recognized words is not include in the combination storing unit, the speech recognition unit executes never sending the recognized words to the control unit (or other) [see Fig. 4, items 404, 410, 412, and their descriptions, especially at column 4,

lines 33-57, when recognition hypotheses for first slot and subsequent slots are compared to grammar of available files and fails to find good matches, return to RECEIVE INPUT SPEECH].

17. Regarding claim 19, Kryze describes a method by describing the content and functionality of the recited limitations recognizable as a whole to one versed in the art as the following terminology:

reproducing method used in a reproduction system that includes a reproducing unit for reproducing a piece of information designated from a plurality of stored pieces of information that can be reproduced; a speech inputting unit for inputting a speech; and comprising steps of recognizing and decomposing the inputted speech; retrieving a piece of information that corresponds to a search and controlling the reproducing unit for designating and reproducing the retrieved piece of information [at column 1, lines 39-67, as playing media files in an embedded device for playing media files having a media file player for playing a selected media file that was selected from media files from a user location of media files for playing; a speech recognizer for received, input speech];

the designated piece and the reproduced pieces are stored in a storing unit for storing the plurality of pieces of information [at column 2, lines 45-47, as the data store of downloaded media files for future access];

the inputted speech is recognized and decomposed into words [at column 4, lines 13-25, as user input speech corresponding to recognition of keywords, such as “all songs”];

a combination information storing unit for storing a plurality of pieces of information [at column 2, line 55-column 3, line 3, as the data store can store the index the includes recognition grammars, descriptive text, supplemental information, trivia, and user-entered voice bindings];

the pieces relate to combination among words [at column 4, lines 22-40, as the keywords form a plurality of hypotheses designated by certain keywords, a first slot, and subsequent slots];

determining whether combination among the recognized words is included in the storing unit, wherein when the combination is not included in the storing unit the recognized words are dealt with by a second procedure wherein the recognized words do not become final recognized words (or other first procedure) [see Fig. 4, items 404, 410, 412, and their descriptions, especially at column 4, lines 33-57, of when recognition hypotheses for first slot and subsequent slots are compared to grammar of available files and fails to find good matches, return to RECEIVE INPUT SPEECH];

wherein when the combination among the recognized words is included in the storing unit, the recognized words are words are recognized as final recognized words, designating a search word from the final recognized words [at column 4, lines 22-39, as designating a search string based on recognition of keywords as search terms for slots when speech recognition hypotheses are compared to grammar indices of available files];

the correspondence to the search is to a search word from the stored pieces of information [at column 4, lines 2-4, as the file associated with the grammar is stored in a data store].

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. The Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Kryze and Fuse

19. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kryze et al. [US Patent 6,907,397] in view of Fuse [Japan Patent Publication 08-195070], already of record.

20. Regarding claim 2, Kryze describes the included claim elements by dependency as indicated elsewhere in this Office action. As shown there, Kryze describes a speech recognition unit accepting speech, instantaneously starting reproducing a given piece of information, and retrieving a certain subgroup of pieces of information based on inputted speech. However, Kryze does not explicitly describe accepting a subsequent speech after starting the reproducing, the certain, retrieved subgroup is a subset of a given group, designating one of the certain subgroup, stopping reproducing the given one and instantaneously starting the certain one.

Like Kryze, Fuse [at abstract] describes a speech recognition unit accepting speech, instantaneously starting reproducing a given piece of information, and retrieving a certain subgroup of pieces of information based on inputted speech. Fuse also describes:

accepting a subsequent speech after starting the reproducing, retrieving a certain subgroup of pieces of information, which is a subset of a given group, based on the inputted subsequent speech, designating and instantaneously reproducing a certain one of the subgroup instead of the given piece of information and stopping reproducing the given one [at DETAILED DESCRIPTION 0012, as a user inputs voice to choose one of the music which flows one by one from a loudspeaker to specify the music which the control section is reproducing when two or more were extracted and the control section will access the music data base to reproduce and perform all of the music in the playback section.

As indicated, Fuse shows that accepting subsequent speech to stop music being reproduced and access a music database to play all of a music piece from a group of previously selected music pieces was known to artisans at the time of invention. Fuse [at Detailed Description 0013] also points out that stopping playing a music piece to play an subsequently selected piece has the

advantage that the song selection control section would reproduce only the selection based on the inputted speech identification information. To the extent that Kryze does not necessarily include stopping playing a music piece to play an subsequently selected piece based on a subsequently inputted speech, Fuse provides the reason that a person ordinary skill in the art of music playback devices at the time of invention would have found it obvious to include the concepts described by Fuse, at least including accepting a subsequent speech after starting the reproducing, retrieving a certain subgroup of pieces of information, which is a subset of a given group, based on the inputted subsequent speech, designating and instantaneously reproducing a certain one of the subgroup instead of the given piece of information and stopping reproducing the given one, as a capability of Kryze's speech recognition control because then only selection based on the inputted speech identification information would be played for the user.

Kryze and Kuriki

21. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kryze et al. [US Patent 6,907,397] in view of Kuriki [Japan Patent Publication 11-095788], already of record.

22. Regarding claim 3, Kryze describes the included claim elements by dependency as indicated elsewhere in this Office action. As shown there, Kryze describes a speech recognition unit accepting speech, instantaneously starting reproducing a given piece of information, retrieving a certain subgroup of pieces of information based on inputted speech. Kryze also describes:

designating the given one for the given group based on a degree of matching the search word [at column 4, lines 66-67, as the selection may be dependent on a confidence score].

However, Kryze does not explicitly describe that the degree of matching the search word is evaluated with a more meticulous criterion with which the given group of pieces of information are retrieved.

Like Kryze, Kuriki [at abstract] also describes music selection and playback by recognizing inputted speech. Kuriki describes:

designating a given one for a given group of pieces of information based on a degree of matching the search word, wherein the degree of matching the search word is evaluated with a more meticulous criterion with which the given group of pieces of information are retrieved so that at least the given one can be designated [at MEANS 0016-17, as a music name list is rearranged into order with the count of selection of each music name so that the recognition of a music name can be raised further and only the music name at the top if the music name list is chosen for retrieval and output for the high order of the rearranged music name list].

As indicated, Kuriki shows that designating a given one for a given group of pieces of information based on a degree of matching the search word, wherein the degree of matching the search word is evaluated with a more meticulous criterion with which the given group of pieces of information are retrieved so that at least the given one can be designated was known to artisans at the time of invention. Kuriki [at MEANS 0018] also points out that increasing recognition possibility by selecting a song from music names with many counts of song selection has the advantage of raising the recognition precision of a music name. To the extent that Kryze does not necessarily include increasing recognition possibility by selecting a song by a more meticulous criteria of choosing the recognition from songs having a high song selection count, Kuriki provides the reason that a person ordinary skill in the art of music playback devices at the time of invention would have found it obvious to include the concepts described by Kuriki, at least including designating a given one for a given group of pieces of information based on a degree of matching the search word, wherein the degree of matching the search word is evaluated with a more meticulous criterion with which the given group of pieces of information are retrieved, for Kryze's selection of a given piece to start playing back instantaneously because the recognition precision of the song selected for playback could be increased.

23. Regarding claim 5, Kryze describes the included claim elements by dependency as indicated elsewhere in this Office action. As shown there, Kryze describes a speech recognition unit accepting speech, instantaneously starting reproducing a given piece of information, retrieving a certain subgroup of pieces of information based on inputted speech.

Kryze also describes:

a more meticulous criterion [at column 4, lines 58-61, as reordering the best matches by popularity based on preference].

However, Kryze does not explicitly describe that the given one is based on a frequency the given one was reproduced.

Like Kryze, Kuriki [at abstract] also describes music selection and playback by recognizing inputted speech. Kuriki describes:

when a given one from a given group of pieces of information is designated, the given one is designated from the group based on a frequency the given one was reproduced [at MEANS 0016-17, as a music name list is rearranged into order with the count of selection of each music name so that the recognition of a music name can be raised further and only the music name at the top if the music name list is chosen for retrieval and output for the high order of the rearranged music name list].

As indicated, Kuriki shows that when a given one from a given group of pieces of information is designated, the given one is designated from the group based on a frequency the given one was reproduced was known to artisans at the time of invention. Kuriki [at MEANS 0018] also points out that increasing recognition possibility by selecting a song from music names with many counts of song selection has the advantage of raising the recognition precision of a music name. To the extent that Kryze does not necessarily include selecting a song by a criteria of choosing the recognition from songs having a high song selection count, Kuriki provides the reason that a person ordinary skill in the art of music playback devices at the time of invention would have found it obvious to include the concepts described by Kuriki, at least when a given one from a given

group of pieces of information is designated, the given one is designated from the group based on a frequency the given one was reproduced, for Kryze's selection of a given piece to start playing back instantaneously because the recognition precision of the song selected for playback could be increased.

Kryze and Kikuchi

24. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kryze et al. [US Patent 6,907,397] in view of Kikuchi et al. [US Patent Application Publication 2002/00107740].

25. Regarding claim 6, Kryze describes the included claim elements by dependency as indicated elsewhere in this Office action. As shown there, Kryze describes a speech recognition unit accepting speech, instantaneously starting reproducing a given piece of information, retrieving a certain subgroup of pieces of information based on inputted speech. Kryze [at column 4, lines 58-61] also describes that the best matches in the play list can be reordered by some criterion of user preference. However, Kryze does not explicitly describe storing a date and hour when each piece of information is stored and designating the given one based on the stored dates and hours.

Like Kryze, Kikuchi [see Fig 1, items 33b] also describes music selection and playback, with storing the music for playback. Kikuchi also describes:

 additionally storing a data and an hour when each of a plurality of pieces of information is stored [at 0108, as store the music data in an area together with receipt date and time];

 designating a given one of given pieces of information based on the stored dates and hours [at 0208, as arrange the pieces of music in descending order of registration dates];

 the pieces are designated for playback [at 0211, as the user reproduces the distributed music data].

As indicated, Kikuchi shows that storing a date and hour when each piece of information is stored and designating the given one based on the stored dates and hours was known to artisans at the time of invention. Kikuchi [at 0195] also points out that stored registration dates have the advantage that the user can easily select and obtain newly arrived pieces of music. To the extent that Kryze does not necessarily include storing a date and hour when each piece of information is stored and designating the given one based on the stored dates and hours, Kikuchi provides the reason that a person ordinary skill in the art of music playback devices at the time of invention would have found it obvious to include the concepts described by Kikuchi, at least including storing a date and hour when each piece of information is stored and designating the given one based on the stored dates and hours, as part of Kryze's additional stored descriptions because the user can then easily select, play, and hear newly arrived pieces of music.

26. Regarding claim 7, Kryze and Kikuchi describe and make obvious the claimed limitations in the same way as for claim 6, where Kikuchi [at 0107-8] describes that the registration date is the date on which the user was charged the distribution fee for receipt of the music data].

Kryze and Swillens

27. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kryze et al. [US Patent 6,907,397] in view of Swillens et al. [International Publication WO 01/84539], already of record.

28. Regarding claim 8, Kryze describes the included claim elements by dependency as indicated elsewhere in this Office action. As shown there, Kryze describes a speech recognition unit accepting speech, instantaneously starting reproducing a given piece of information, retrieving a certain subgroup of pieces of information based on inputted speech. Kryze [at column 4, lines 58-61] also describes:

when one of the recognized words indicates an operational command for operating the reproductions system, the control unit executes the operational command [at column 5, lines 11-12, as entering a play mode based on the keyword “play” in the speech input].

However, Kryze does not explicitly describe when all the recognized words do not indicate an operational command, the control unit recognizes all the recognized words as candidates from which the search word is designated.

Like Kryze, Swillens [at page 2, lines 6-25] also describes a music playback system that is integrated with speech recognition of operational commands and content information, and Swillens describes:

when one of the recognized words indicates an operational command for operating the reproductions system, the control unit executes the operational command [at page 5, lines 29-34, as interpreting “play twice” and “play one” as play a song twice in succession and play another song];

wherein, when all the recognized words do not indicate the operational command, the control unit recognizes all the recognized words as candidates from which the search word is designated [at page 6, lines 3-12, as the voice commands consist only of keywords and the system processes the voice input to match is with one of the options available as a search algorithm and starts playing].

As indicated, Swillens shows that when all the recognized words do not indicate the operational command, the control unit recognizes all the recognized words as candidates from which the search word is designated was known to artisans at the time of invention. Swillens [at page 1, line 27-page 2, line 5] also points out that use of voice-controllable equipment is enhanced if the voice commands are linked to the information content to be played out, rather than the apparatus. To the extent that Kryze does not necessarily include all the recognized words do not indicate the operational command and the control unit recognizes all the recognized words as candidates from which the search word is designated, Swillens provides the reason that a person ordinary skill in the art of music playback devices at the time of invention would have found it

obvious to include the concepts described by Swillens, at least including when all the recognized words do not indicate the operational command, the control unit recognizes all the recognized words as candidates from which the search word is designated, so the Kryze does not need the apparatus-specific commands because linking the voice commands to the information content to be played out, rather than the apparatus enhances the use of voice-controllable equipment according to the descriptions of Swillens.

29. Regarding claim 9, Kryze also describes:

the operational command includes a reproducing command for reproducing based on a list [at column 5, lines 7-12, as entering a play mode based on the keyword “play” in the speech input for songs added to a play list];

the operational command includes a listing command for listing up a list for reproducing [at column 6, lines 2-4, as the user can state “Add” such that the corresponding play list can be edited];

when the indicated operational command is the listing command and a piece of information is being reproduced, the control unit registers in the list the piece of information that is being reproduced [at column 6, lines 1-7, as in the midst of listening to a play list, the user can state “Add”, and the corresponding play list can be edited based on selection of a song that is already playing];

when the indicated operational command is the reproducing command, the control unit reproduces a piece of information in the list based on the list [at column 5, lines 7-12, as entering a play mode based on the keyword “play” in the speech input for songs added to a play list].

Kryze and Narita

30. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kryze et al. [US Patent 6,907,397] in view of Narita et al. [Japan Patent Publication 2001-318945], already of record.

31. Regarding claim 10, Kryze describes the included claim elements by dependency as indicated elsewhere in this Office action. As shown there, Kryze describes a speech recognition unit accepting speech for selecting pieces of information based on one of the recognized words, retrieving a certain subgroup of pieces of information based on inputted speech. However, Kryze does not explicitly describe designating a given group of candidates for one of the recognized words that is a subset of a plurality of candidates, wherein a plurality of search word candidates is designated from the given group of candidates received from the speech recognition unit, and retrieving a certain group of pieces of information that corresponds to at least one of the plurality of search word candidates from the stored pieces of information.

Like Kryze, Narita [at DETAILED DESCRIPTION 0006] selects pieces of information in a group based on inputted search strings based on words, and Narita describes:

when a speech recognizing unit has a plurality of candidates for one of the recognized words, designating a given group of candidates for one of the recognized words that is a subset of a plurality of candidates [at DETAILED DESCRIPTION 0029, as division processing of the inputted noun phrase, which is decomposition into three word-pairs for three retrieval conditions];

wherein a plurality of search word candidates is designated from the given group of candidates [at DETAILED DESCRIPTION 0030, as choosing only two word-pairs from the three word-pairs set up];

and retrieving a certain group of pieces of information that corresponds to at least one of the plurality of search word candidates from the stored pieces of information [at DETAILED DESCRIPTION 0032 and 0028, as generation of retrieval conditions is performed using the word and the word pair is chosen for the retrieval condition, and the document which agrees on retrieval conditions is extracted from among the registered documents].

As indicated, Narita shows that designating a given group of candidates for one of the recognized words that is a subset of a plurality of candidates, wherein a plurality of search word

candidates is designated from the given group of candidates received from the speech recognition unit, and retrieving a certain group of pieces of information that corresponds to at least one of the plurality of search word candidates from the stored pieces of information was known to artisans at the time of invention. Narita [at DETAILED DESCRIPTION 0033] also points out that decomposing the three words in retrieval conditions of two words loosens retrieval conditions moderately with the advantage that retrieval precision can be raised. To the extent that Kryze does not necessarily include designating a given group of candidates for one of the recognized words that is a subset of a plurality of candidates, wherein a plurality of search word candidates is designated from the given group of candidates received from the speech recognition unit, Narita provides the reason that a person ordinary skill in the art of music reproduction devices at the time of invention would have found it obvious to include the concepts described by Narita, at least including designating a given group of candidates for one of the recognized words that is a subset of a plurality of candidates, wherein a plurality of search word candidates is designated from the given group of candidates received from the speech recognition unit, and retrieving a certain group of pieces of information that corresponds to at least one of the plurality of search word candidates from the stored pieces of information for Kryze's recognized speech input because retrieval precision can be raised as described by Narita.

Kryze and Takahashi

32. Claims 13, 14, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kryze et al. [US Patent 6,907,397] in view of Takahashi et al. [[US Patent Application Publication 2002/0188391].

33. Regarding claim 13, Kryze describes the included claim elements by dependency as indicated elsewhere in this Office action. As shown there, Kryze describes selecting pieces of information, retrieving a certain subgroup of pieces of information, and reproducing a piece of the

selected information as music. However, Kryze does not explicitly describe that the reproduction system is provided in a vehicle.

Like Kryze, Takahashi [at 0002-7] describes selecting pieces of information, retrieving a certain subgroup of pieces of information, and reproducing a piece of the selected information as music audio, and Takahashi describes:

the reproduction system is provided in a vehicle [at 0001, a the information outputting apparatus installed within a car].

As indicated, Takahashi shows that a reproduction system provided in a vehicle was known to artisans at the time of invention. Takahashi [at 0036] also points out that providing the reproductions system in a vehicle has the advantage of performing audio output of the content information that is appropriate for the movement of the vehicle. To the extent that Kryze does not necessarily include providing the reproduction system in a vehicle, Takahashi provides the reason that a person ordinary skill in the art of music reproduction devices at the time of invention would have found it obvious to include the concepts described by Takahashi, at least including providing the reproduction system of Kryze in a vehicle because Kryze's audio output could then be output as appropriate for the movement of the vehicle.

34. Claim 14 sets forth limitations similar to claim 1. Kryze describes the limitations as indicated there. Kryze describes the apparatus embodiment; however, Kryze does not describe other embodiments. In particular, Kryze does not explicitly describe a computer program product that includes a computer useable medium and instruction groups to achieve the functionality of Kryze's embodiment.

Like Kryze, Takahashi [at 0002-7] describes selecting pieces of information, retrieving a certain subgroup of pieces of information, and reproducing a piece of the selected information as music audio, and Takahashi describes:

a computer program product that includes a computer useable medium and instruction groups to achieve the functionality [at claim 17, as a program storage device readable by a computer for tangibly embodying a program of instructions executable by a computer to perform a method].

To the extent that a computer-useable medium and instruction groups are not necessarily in Kryze's system, it would have been obvious to one of ordinary skill in the art of implementing functional descriptions of operations at the time of invention to include the concept of executable media used with executable program instructions to implement the processing functions of Kryze because that would have provided the best implementation under particular circumstances identified and evaluated by a skilled artisan. For example, it is within the ordinary skill of an artisan to determine that software elements, such as Takahashi's concept, benefits changing processing functions or adding other processing functions because software elements are more easily modified than hardware elements.

35. Regarding claim 17, if the Examiner's assumption about dependency from claim 16 is correct, Kryze describes the included claim elements by dependency as indicated elsewhere in this Office action. The claim sets forth additional limitations similar to limitations set forth in claim 13. Kryze and Takahashi describe and make obvious the additional limitations as indicated there.

36. Claim 18 sets forth limitations similar to claim 19. Kryze describes the limitations as indicated there. Kryze describes the apparatus embodiment; however, Kryze does not describe other embodiments. In particular, Kryze does not explicitly describe a computer program product that includes a computer useable medium and instruction groups to achieve the functionality of Kryze's embodiment.

Like Kryze, Takahashi [at 0002-7] describes selecting pieces of information, retrieving a certain subgroup of pieces of information, and reproducing a piece of the selected information as music audio, and Takahashi describes:

a computer program product that includes a computer useable medium and instruction groups to achieve the functionality [at claim 17, as a program storage device readable by a computer for tangibly embodying a program of instructions executable by a computer to perform a method].

To the extent that a computer-useable medium and instruction groups are not necessarily in Kryze's system, it would have been obvious to one of ordinary skill in the art of implementing functional descriptions of operations at the time of invention to include the concept of executable media used with executable program instructions to implement the processing functions of Kryze because that would have provided the best implementation under particular circumstances identified and evaluated by a skilled artisan. For example, it is within the ordinary skill of an artisan to determine that software elements, such as Takahashi's concept, benefits changing processing functions or adding other processing functions because software elements are more easily modified than hardware elements.

Conclusion

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38. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L. Storm, of Division 2626, whose telephone number is (571) 272-7614. The examiner can normally be reached on weekdays between 7:00 AM and 3:30 PM Eastern Time. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602.

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September 17, 2007

/Donald L. Storm/

Primary Patent Examiner
Division 2626